

Extension of Air Transport Minimum Data Set to Fixed-Wing Environment

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ABSTRACT

The Air Transport Minimum Data Set (ATMDS) was developed to address data needs for rotor wing transport of critically ill or injured patients. Using a focus group methodology, nurses, paramedics, pilots, and communications specialists identified additional concepts such as time arrived at airport via ground transportation to represent the complexity present in fixed wing transport. Specific concepts, selected terms for the concepts and definitions will be discussed.

BACKGROUND

The ATMDS¹ was developed to meet a need to standardize terms and their definitions used to record timestamps and time intervals relevant to the air transport of critically ill or injured patients. An initial study of 96 patient records from 51 different transport programs found a total of 206 terms used to describe time (points or intervals). A subsequent Delphi study² and international survey³ demonstrated support for a minimum data set containing 18 terms. The original data set was limited to transport via rotor wing (helicopter).

The purpose of this study is to expand the Air Transport Minimum Data Set to include terms relevant to fixed wing (airplane) transport. Fixed wing transport is more complex than transport by rotor wing, requiring multiple changes in mode of transportation as the team and patient move from ground to air to ground transport in the process of moving the patient from the referring to receiving facility. These multiple changes create additional time points and intervals not present with rotor wing transport.

METHODOLOGY

A focus group methodology was selected. Focus groups facilitate gathering data regarding opinions, knowledge, perceptions, and concerns of a small group⁴. Focus groups of between 6 and 10 individuals were deemed optimal so as to allow adequate interaction with sufficient time for input from each participant. Subjects were selected from nurses, paramedics, pilots, and communication specialists active in the air transport industry. Audio

taping the conversations facilitated data analysis through the availability of a written transcript.

Consent was obtained from all participants. Participants were provided with a list of the ATMDS terms and their definitions prior to the meeting.

During the focus group meeting the subjects were guided in identifying the steps involved in a fixed wing transport and the important time intervals for describing a transport. Subjects then identified relevant terms not currently in the ATMDS and proposed definitions for the terms.

RESULTS

Several new concepts such as time arrived at airport via ground transportation, flight time, and time departed airport were proposed. Subjects provided potential terms and definitions for the concepts, with consensus in some but not all cases. The terms and definitions will be discussed on the poster.

CONCLUSIONS

The ATMDS was designed to represent time related concepts for rotor wing transport. However, the original ATMDS does not contain enough concepts to adequately represent the complexity of fixed wing transport. Several new concepts, terms, and definitions will be proposed. Consensus on these additions has not yet been obtained and will require further investigation.

REFERENCES

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